## APPENDIX K Regional Attenuation Facility Task Force Executive Summary

## **EXECUTIVE SUMMARY**

The St. Lucie and Martin County Commissions created the Regional Attenuation Facility Task Force (RAFTF) by resolution in Spring 1995. The purpose was to study the 775 square mile St. Lucie River Water shed and make recommendations as to "the most appropriate sites and locations for one or more regional attenuation facilities (RAFs) to address the much-needed upland retention of fresh water to supplement the drainage canals that make up the Central and Southern Florida Project in the upper east coast region, and to prevent further degradation of the Indian River Lagoon and St. Lucie River." Regional attenuation facilities, more recently termed "Water Preserve Areas" (WPAs) by the U.S. Army Corps of Engineers, are large multi-purpose water management areas.

The Task Force created three committees that worked simultaneously to: 1) identify potential locations; 2) classify locations according to environmental and design variables; and 3) estimate the costs and benefits of establishing WPAs. This effort by the Task Force initially resulted in identification of 20 potential WPA sites totaling over 65,000 acres, and this Task Force Report summarizing its work.

The South Florida Water Management District (SFWMD) estimates that storage of an additional 180,000 acre-feet of fresh water in the watershed is necessary to accomplish environmental restoration goals for the Indian River Lagoon and St. Lucie River systems. The total land required to store this fresh water, at an average of four feet in depth, is approximately 45,000 acres or about 9 percent of the watershed's total land area.

The Task Force Report reaches four major conclusions. First, environmental restoration of the Estuary and Lagoon does not adequately reflect the total benefits of WPAs, such as:

- Water conservation
- Recreation
- Water supply for municipal, industrial and agricultural users
- Wildlife habitat restoration and mitigation
- Sediment control
- Augmentation of minimum low flows during the dry season to important estuarine resources
- Climatic benefits
- Aquifer recharge
- Flood protection

Second, the value of the total benefits of WPAs have been previously underestimated, and the costs over-estimated. The "benefit-cost ratio" for construction of WPAs looks very favorable.

Third, there are only a few "good" sites (i.e., those which can combine economically adequate size with low environmental impacts); and there are no sites which can provide all the benefits of a WPA without some adverse direct environmental impacts.

Fourth, based on the two design charrettes and other public input received, the citizens are

in favor of integrating uplands, restored/preserved wetlands and deep water storage areas for multiple water resource and recreational benefits as the main design objective for WPAs.

The Task Force recommends that: 1) the Counties endorse this Report and use it to build consensus among the public for the establishment of WPA; and, 2) the Task Force be continued to encourage the Corps and SFWMD to establish WPAs as an important component of the overall system for preserving and restoring the Region's water resources.